REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 1-7, 9, 10 and 15-18 are cancelled, claim 19 has been amended and claims 20-22 have been added. After amending the claims as set forth above, claims 8, 11-14 and 19-22 are pending in this application.

Rejection Under 35 USC § 112, Second Paragraph

Claim 19 has been amended to render the 112 rejection moot. Specifically, the subject of the method of claim 19 has been added.

Rejections Under 35 USC § 103

Applicants again urge that US Patent Nos. 6,384,075 and 6,172,113 were assigned to the same assignee as for the present application and, therefore, qualify for the safe harbor provision of 35 USC § 103(c). This was argued to the Examiner in the last Response but the Examiner did not address this line of reasoning in the outstanding Office Action. Section 103(c) is reproduced below.

> (c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, **shall not preclude patentability** under this section where the subject matter and the claimed invention were, at the time the invention was made, **owned by the same person or subject to an obligation of assignment to the same person**. (Emphasis added).

MPEP §§ 706(l)(1)-(3) discuss in detail how examiners are to handle the safe harbor provision of section 103.

Therefore, in accordance with 35 USC 103(c) and MPEP §§ 706(l)(1)-(3), the undersigned attorney of record states that, the present application and US Patent Nos. 6,384,075 and 6,172,113 were, at the time the invention of the present application was made, owned by Shionogi & Co., Ltd. In accordance with MPEP § 706.02(l)(2), this statement is sufficient to disqualify US Patent Nos. 6,384,075 and 6,172,113 from being used as prior art in a rejection for obviousness against the present claims.

Provisional Rejections for Judicially Created Double Patenting

With respect to the rejection for judicially created double patenting, applicants contend that this rejection is improper for the following reasons. Applicants request that the Examiner withdraw the provisional judicially created double patenting rejection over Application No. 10/297,065. With the submission of this response, applicants believe that all outstanding rejections have been overcome. MPEP § 804 I. B., reproduced below, states that when a provisional double patenting rejection is the only rejection remaining, the Examiner should withdraw the rejection and allow the application to issue as a patent.

> The "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patenting rejection is the only rejection remaining in one of the applications. If the "provisional" double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent.
>
> If the "provisional" double patenting rejections in both applications are the only rejections remaining in those applications, the examiner should then withdraw that rejection in one of the applications (e.g., the application with the earlier filing date) and permit the application to issue as a patent. The examiner should maintain the double patenting rejection in the other application as a "provisional" double patenting rejection which will be converted into a double patenting rejection when the one application issues as a patent.

Rejection Under 35 USC § 112, First Paragraph

Claim 15 has been deleted rendering this rejection moot.

Rejections Under 35 USC § 103

Applicants contend that the present invention is not obvious over WO 97/00853A because the generic teachings of this patent would not motivate one of ordinary skill in the art

to arrive at the present invention rather than over the large number of other possible variations disclosed in WO 97/00853A. Moreover, the compounds of the present invention display unexpectedly superior results that could have not been presaged by the disclosure of WO 97/00853A.

The compound of the present claim 8 has "(heteroaryl)-X^2-(heteroaryl)" moiety as (-X^1-X^2-X^3) part and such compounds are exemplified as Compound (I-1b), (I-47), (I-59), (I-79), (I-80), (I-82), (I-88), (I-93), (I-94), (I-104), (I-106), (I-129), (I-136), (I-168), (I-169), (I-170), (I-182), (II-15), (II-18), (II-21), (II-30), (II-34), and the like in the description. F

The antagonistic activities of the above compounds for PGD_2 and TXA_2 are described in Tables 31 and 32 and for example, IC_{50} values of the compound (I-1b) for PGD_2 and TXA_2 are 0.0043 and 0.003 μM respectively. As shown in Table 33, the IC_{50} values of the compound (B-1) which is described as Compound (2a-194) in WO 97/00853 (US 6,384,075 and US 6,172,113) are 0.0082 and 3.8 μM respectively. Almost all antagonistic activities for TXA_2 of the compounds exemplified above are hundred times stronger than that of the compound of WO 97/00853. There is no suggestion or teaching that the compound having "(heteroaryl)-X^2-(heteroaryl)" moiety as (-X^1-X^2-X^3) part has superior TXA_2 antagonistic activity.

Furthermore, as applicants have stated, a compound having a dual antagonistic activity against both a TXA_2 receptor and a PGD_2 receptor is useful as a therapeutic agent for various diseases caused by TXA_2 or PGD_2. For example, in the case of bronchial asthma, it is known that TXA_2 cause potent tracheal contraction and respiratory anaphylaxis and PGD_2 effects infiltration of eosionophils. TXA_2 and PGD_2 are thought to be one of causative substances of the pathopoiesis and advance of asthma, thus the dual antagonistic compounds are expected to be more potent agents for treating asthma than known antagonists that act against a single receptor. Further, in the case of allergic rhinitis, it is recognized that TXA_2 and PGD_2 cause the swelling of nasal mucosa through the aggravation of vascular permeability, and PGD_2 induces the nasal blockage through the enlargement of vascular volume. Therefore, dual antagonistic compounds are expected to be more potent agents for treating nasal blockage than known antagonists. These diseases and condition thereof might be treated by administering both a TXA_2 receptor antagonist and a PGD_2 receptor antagonist

at the same time, for example, in combination therapy or as a mixture thereof. But the administration of two or more agents often causes some problems due to the difference of their metabolic rate. For example, when the antagonists are different from each other in the time to reach a maximum blood concentration or the duration of action, they do not always efficiently exhibit each receptor antagonistic effect at the same time, failing to give a desired additive or synergic effect. The present invention thereby unexpectedly overcomes these disadvantages of the presently known compounds.

Therefore, applicants contend that the outstanding rejection for obviousness under 35 USC § 103 is improper and should be withdrawn.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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